Listing of Claims:

1. Claim 1 (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising a mixture of (1) a carbohydrate capable of being a metabolic source for Salmonella bacteria and supporting colonies of Salmonella but incapable of being a metabolic source for said other bacteria, the metabolic reaction between Salmonella bacteria and the carbohydrate releasing acid into the portion of the medium of the reaction, (2) a pH indicator dye that changes the color of said portion of the plating medium to a first color different from the color of the medium responsive to a change in the pH of said portion of the medium, (3) a first substrate that does not react with Salmonella bacteria but reacts to the enzyme beta-galactosidase to produce a second color in the medium where it is acted upon by the enzyme beta-galactosidase, the second color contrasting with the first color and the color of the medium, (4) a second substrate that does not react with Salmonella bacteria but reacts to the enzyme beta-galactosidase to produce said second color in the medium where it is acted upon by the enzyme beta-galactosidase, the first substrate reacting to the presence of the enzyme beta-galactosidase in a significantly shorter time than the second substrate reacts to said ezyme, whereby colonies of said other bacteria contain the second color, and (5) an ingredient for thickening the mixture in sufficient quantity to solidify the mixture.

2. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria comprising the medium of claim 1 wherein the carbohydrate is one or more members of the

group consisting of 2-Deoxy-D-Ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol.

3. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria comprising the medium of claim 1 wherein the first substrate and the second substrate are members of the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D- galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D- galactopyranoside, 3-indoxyl-beta-D- galactopyranoside, 6-chloro-3-indoxyl-beta-D- galactopyranpside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D- galactopyranoside, 5-iodo-3-indoxyl-beta-D-galactopyranoside, 4-methylumbelliferyl-beta-D-galactopyranoside and N-methylindoxyl-beta-D-galactopyranoside.

4. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria comprising the medium of claim 1 wherein the first substrate is 5-bromo-4-chloro-3-indoxyl-beta-D- galactopyranoside, and the second substrate is 3-indoxyl-beta-D- galactopyranoside.

5. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria comprising the mixture of claim 2 in combination with an inhibitor of the group consisting of bile salt, bile salt #3, tellurite, sodium novobiocin and cefsulodin.

6. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria comprising the medium of claim 1 in combination with a chromogenic substrate enhancer.

7. (Currently amended) An isolation plating medium for the identification of Salmonella bacteria from a sample likely to contain Salmonella bacteria and other bacteria

comprising the medium of claim 6 wherein the chromogenic substrate enhancer consists of at least one member of the group isopropyl-beta-D-thiogalactopyranoside, 1-O-methyl-beta-D-galactopyranoside, methyl-beta-D-thiogalactopyranoside, and methyl-beta-D-thiogalactopyranoside.

8. (Cancelled).

9. (Currently amended) An isolation plating medium for the identification of Salmonella from a sample containing Salmonella and a plurality of other bacteria comprising the mixture of claim 1 wherein the carbohydrate is 2-Deoxy-D-Ribose, and the first and second chromogenic substrates are 5-bromo-4-chloro-3-indoxyl-beta-D- galactopyranoside and 3-indoxyl-beta-D- galactopyranoside, respectively.

10. (Currently amended) An isolation plating medium for the identification of Salmonella from a sample containing Salmonella and a plurality of other bacteria that release the enzyme beta-galactosidase upon reacting with a metabolic source consisting essentially of a mixture of (1) at least one carbohydrate that is metabolizable by Salmonella and is of the group consisting of 2-Deoxy-D-Ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol, the metabolic reaction between the carbohydrate and Salmonella bacteria releasing acid into the portion of the medium of the reaction (2) a pH indicator dye that changes the color of said portion of the plating medium to a first color responsive to a change in the pH of the medium, (3) a first chromogenic substrate that does not react with Salmonella bacteria and changes the color of the medium to a second color responsive to the presence of the beta-galactosidase enzyme, (4) a second chromogenic substrate that does not react to Salmonella bacteria and changes the color of the medium to approximately the same second color responsive to the presence of the beta-galactosidase enzyme, the first substrate reacting to the presence of the beta-galactosidase

enzyme more quickly than the second substrate, and the first and second colors contrasting with each other and with the color of the medium, wherein the first substrate and the second substrate are members of the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D- galactopyranoside, 3-indoxyl-beta-D- galactopyranoside, 6-chloro-3-indoxyl-beta-D- galactopyranoside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D-galactopyranoside, 5-iodo-3-indoxyl-beta-D-galactopyranoside, 4-methylumbelliferyl-beta-D- galactopyranoside, and N-methylindoxyl-beta-D-galactopyranoside, and (5) an ingredient for thickening the mixture in sufficient quantity to solidify the mixture.

11. (Original claim) An isolation plating medium for the identification of Salmonella from a sample containing Salmonella and a plurality of different bacteria comprising the mixture of claim 10 wherein the ingredient for thickening the mixture is agar.

12. (Currently amended) The method of detecting the presence of Salmonella in a sample that is likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising the steps of inoculating an essentially solid plating medium with the test sample, wherein said plating medium comprises a mixture of(1) a carbohydrate capable of being a metabolic source for Salmonella bacteria and supporting colonies of Salmonella but incapable of being a metabolic source for said other bacteria, the metabolic reaction between Salmonella bacteria and the carbohydrate releasing acid into the portion of the medium of the reaction, (2) a pH indicator dye that changes the color of said portion of the plating medium to a first color different from the color of the medium responsive to a change in the pH of said portion of the medium, (3) a first substrate that does not react with Salmonella bacteria but reacts to the enzyme beta-galactosidase to produce a second color in the medium where it is acted upon by the enzyme beta-

galactosidase, the second color contrasting with the first color and the color of the medium, (4) a second substrate that does not react with Salmonella bacteria but reacts to the enzyme beta-galactosidase to produce said second color in the medium where it is acted upon by the enzyme beta-galactosidase, the first substrate reacting to the presence of the enzyme beta-galactosidase in a significantly shorter time than the second substrate reacts to said ezyme, whereby colonies of said other bacteria contain the second color, and (5) an ingredient for thickening the mixture in sufficient quantity to solidify the mixture, thereafter incubating said plating medium for a sufficient period to obtain colonies of bacteria producing one or more of said colors, and examining the plating medium for colonies of said first color.

13. (Currently amended) The method of detecting the presence of Salmonella in a sample that is likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising the steps of claim 12 wherein the carbohydrate is one or more members of the group consisting of 2-Deoxy-D-Ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol.

14. (Currently amended) The method of detecting the presence of Salmonella in a sample that is likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising the steps of claim 12 wherein the first substrate and the second substrate are members of the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D- galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D- galactopyranoside, 3-indoxyl-beta-D- galactopyranoside, 6-chloro-3-indoxyl-beta-D- galactopyranpside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D-galactopyranoside, 5-iodo-3-indoxyl-beta-D-galactopyranoside, 4-methylumbelliferyl-beta-D-galactopyranoside and N-methylindoxyl-beta-D-galactopyranoside.

15. (Currently amended) The method of detecting the presence of Salmonella in a sample that is likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising the steps of claim 14 wherein the plating medium includes a chromogenic substrate enhancer.

16. (Currently amended) The method of detecting the presence of Salmonella in a sample that is likely to contain Salmonella bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on reacting with a metabolic source, comprising the steps of claim 12 , wherein the carbohydrate capable of being a metabolic source for Salmonella bacteria and supporting colonies of Salmonella bacteria is one or more members of the group consisting of 2-Deoxy-D-Ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol, and wherein the first substrate and the second substrate are members of the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D- galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D-galactopyranoside, 3-indoxyl-beta-D- galactopyranoside, 6-chloro-3-indoxyl-beta-D-galactopyranpside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D-galactopyranoside, 5-iodo-3-indoxyl-beta-D-galactopyranoside, 4-methylumbelliferyl-beta-D-galactopyranoside and N-methylindoxyl-beta-D-galactopyranoside.